AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for limiting and monitoring the use of a data communications connection subject to payment between at least two IP clients in a packet-switched connection network through which a mutual data communications connection is set between the at least two clients, the at least two clients including a client to be billed, the method comprising:

setting a signalling connection between a connection-formation system in the connection network and at least the client to be billed, the signalling connection being separate from the mutual data communications connection;

setting a traffic limiter in the connection network for the mutual data communications connection based on at least one ~~of the~~ header-field property ~~ies~~ of the packets being transmitted;

monitoring the data communications connection individually for an active session established ~~which is actively being transmitted~~ over the mutual data communications connection between the at least two clients, the data communications connection being monitored for data communications services being provided to the client to be billed;

controlling the billing to be charged in a billing system session-specifically for the data communications connection based on the monitored data communications services;

receiving a message at the connection-formation system ~~from~~ via the signalling connection concerning the interruption or termination of the session being transmitted over the mutual data communications connection;

in response to the message concerning the interruption or termination of the session, instructing the traffic limiter to break, interrupt, or close the session over the mutual data communications connection; and

setting a two-way signalling link between the connection-formation system and the billing system through a mediator.

2. (Previously Presented) A method according to Claim 1, wherein:

sessions are monitored and billed for using the connection-formation system by receiving a message from the client concerning the termination or interruption of a mutual session or other

data communications connection, and

in response to the message, the connection-formation system is used to:

direct a message to the billing system to limit the session-specific billing, and

instruct the traffic limiter to close or interrupt the session or the mutual data communication connection through the connection network between the at least two clients.

3. (Previously Presented) A method according to Claim 1, further comprising:

using the connection-formation system to receive an initiation message for a data-communications-based service involving at least one first client and at least one second client, and to forward the initial message to the billing system.

4. (Currently Amended) A method according to Claim 1, wherein

a message confirming the payment required for the use of a data-communications-based service is received from the direction of the billing system, and

in response to the message confirming the payment, an operator's traffic-relaying system is instructed to perform at least one of:

cause the formation of a mutual data communications connection between the at least one first ~~(11)~~ and one second client ~~(12)~~, and

set properties of the mutual data communications connection to be those which are required by a data-communications-based service, or are advantageous in terms of the data-communications service.

5. (Previously Presented) A method according to Claim 1, wherein the connection-formation system performs operations according to the MIDCOM protocol for at least one of:

opening or closing the data communications connection, and

opening or closing the session between the at least two clients.

6. (Previously Presented) A method according to Claim 1, wherein the connection-formation system includes an interface set for a SIP server in the direction of the traffic limiter.

7. (Previously Presented) A method according to Claim 1, wherein the at least two clients includes a client, which is addressed to an address-search system being used.

8. (Previously Presented) A method according to Claim 7, wherein a SIP system is used as the address-search system.

9. (Currently Amended) A method according to Claim 7, wherein the connection-formation system ~~(13)~~ is set to establish data communications connections between the at least two clients using the address-search system.

10. (Previously Presented) A method according to Claim 1, wherein the billing system is set to initiate the provision of instructions to a traffic-relaying system of the connection network to interrupt or terminate a session between the at least two clients.

11. (Previously Presented) A method according to Claim 24 wherein a traffic-relaying system of the connection network is instructed to interrupt or terminate the session or data communications connection between the at least two clients in response to the state data indicating an insufficient payment in the billing system for continuing the session or data communications connection.

12. (Currently Amended) A system for limiting the use of a data communications connection subject to payment between IP clients in a packet-switched connection network, comprising:

a first device configured as a connection-formation system for setting a mutual data communications connection between at least two clients through the connection network, and for setting a mutual signalling connection separate from the mutual data communications connection;

a second device configured as a mediator for monitoring the data communications

connection individually for an active session established ~~which is actively being transmitted~~ over the data communications connection for data communications services provided to the clients, and controlling billing for the data communications connection to be charged session-specifically based on the monitored data communications services;

a third device configured as a traffic limiter based on ~~the~~ properties of ~~the~~ header fields of the packets being transmitted for the mutual data communications connection; and ~~,~~

a traffic relaying system including a network for transmitting at least one session over the mutual data communications connection;

wherein the connection-formation system is configured to:

receive a message ~~from~~ via the mutual signalling connection concerning the interruption or termination of the session being transmitted over the mutual data communications connection,

instruct the traffic limiter to break or interrupt a session over the mutual data communications connection in response to the message concerning the interruption or termination of the session, and

set a two-way signalling link between the connection-formation system and a billing system through the mediator.

13. (Previously Presented) A system according to Claim 12, wherein the connection-formation system is configured to:

receive a message from a client terminating or interrupting a mutual session or other data communications connection,

direct a message for limiting session-specific billing to the billing system in response to the received message, and

instruct the at least one traffic limiter to close or interrupt the session or mutual data communications connection through the connection network between the at least two clients in response to the received message.

14. (Previously Presented) A system according to Claim 12, wherein the connection-formation system is configured to receive an initiation message for a data-communications-based service concerning the at least two clients, and forward the initiation message to the billing system.

15. (Previously Presented) A system according to Claim 12, wherein the connection-formation system is configured to:

receive from the billing system a message confirming the payment required for the use of the data-communications-based service,

instruct the traffic-relaying system in response to the message confirming the payment,

cause the formation of a mutual data communications connection between the at least two clients, and

set properties of the mutual data communications connection to be those which are required by the data-communications-based service, or are advantageous in terms of the data-communications-based service.

16. (Previously Presented) A system according to Claim 12, wherein the connection-formation system uses operations according to the MIDCOM protocol for at least one of:

opening or closing the data communications connection, and

opening or closing the session between the at least tow clients.

17. (Previously Presented) A system according to Claim 12, wherein the connection-formation system includes an interface set for a SIP server in the direction of the at least on traffic limiter.

18. (Previously Presented) A system according to Claim 12, wherein the at least two clients includes a client addressed to an address-search system.

19. (Previously Presented) A system according to Claim 18, wherein the address-search system is a SIP system.

20. (Previously Presented) A system according to Claim 18, wherein the address-search system is used for setting the connection-formation system to establish data communications connections between the at least two clients.

21. (Previously Presented) A system according to Claim 12, wherein the connection-formation system is configured to set the billing system to initiate the provision of instructions to the traffic-relaying system to interrupt or terminate the session between the at least two clients.

22. (Previously Presented) A system according to Claim 26, wherein the connection-formation system is configured to instruct the traffic-relaying system to interrupt or terminate the session or data communication connection between the at least two clients in response to the state data indicating an insufficient payment in the billing system for continuing the session or data communications connection.

23. (Previously Presented) A computer program stored on a computer-readable storage medium, the program comprising instructions to be executed by one or more computers to perform the combination of steps recited in claim 1 or 24.

24. (Currently Amended) A method for limiting and monitoring the use of a data communications connection subject to payment between at least two IP clients in a packet-switched connection network through which a mutual data communications connection is set between the at least two clients, the method comprising:

setting a signalling connection between a connection formation system in the connection network and at least the client to be billed, the signalling connection being separate from the mutual data communications connection;

setting a traffic limiter in the connection network for the mutual data communications connection based on at least one ~~of the~~ header-field property ~~ies~~ of the packets being transmitted;

monitoring the data communications connection individually for an active session established ~~which is actively being transmitted~~ over the mutual data communications connection

between the at least two clients, the data communications connection being monitored for data communications services being provided to the client to be billed;

controlling the billing to be charged in a billing system session-specifically for the data communications connection based on the monitored data communications services;

receiving state data at the connection-formation system from the billing system over the message connection concerning an absence or a deficiency of a payment required in the billing system for providing the session being transmitted over the mutual data communications connection;

in response to the state data received from the billing system, instructing the traffic limiter to break, interrupt, or close the session over the mutual data communications connection; and

setting a two-way signalling link between the connection-formation system and the billing system through the mediator.

25. (Previously Presented) A method according to Claim 24, wherein:

each session is monitored and billed for using the connection-formation system by responding to a message sent from the billing system concerning the lack or deficiency of a payment allocated to the session,

in response to the message, the connection-formation system is used to:

direct a message to the billing system to limit the session-specific billing, and

instruct the traffic limiter to close or interrupt the session or the mutual data communication connection through the connection network between the at least two clients.

26. (Currently Amended) A system for limiting the use of a data communications connection subject to payment between IP clients in a packet-switched connection network, comprising:

a first device configured as a connection-formation system for setting a mutual data communications connection between at least two clients through the connection network, and for setting a mutual signalling connection separate from the mutual data communications connection;

a second device configured as a mediator for monitoring the data communications connection individually for an active session established ~~which is actively being transmitted~~ over the data communications connection for data communications services provided to the clients, and controlling billing for the data communications connection to be charged session-specifically based on the monitored data communications services;

a third device configured as a traffic limiter based on ~~the~~ properties of ~~the~~ header fields of the packets being transmitted for the mutual data communications connection; and

a traffic relaying system including a network for transmitting at least one session over the mutual data communications connection,

wherein the connection-formation system is configured to:

receive state data from the billing system via a message connection concerning a lack or deficiency of payment required by the billing system for the provision of the session being transmitted over the mutual data communications connection,

instruct the traffic limiter to break or interrupt a session over the mutual data communications connection in response to the state data received from the billing system, and

set a two-way signalling link between the connection-formation system and a billing system through the mediator.

27. (Previously Presented) A system according to Claim 26, wherein the connection-formation system is configured to:

receive a message sent from the billing system in response to the insufficiency or smallness of a payment directed to the session,

direct a message for limiting session-specific billing to the billing system in response to the received message, and

instruct the traffic limiter to close or interrupt the session or mutual data communications connection through the connection network between the at least two clients in response to the received message.